

Fig. 1A Prior art

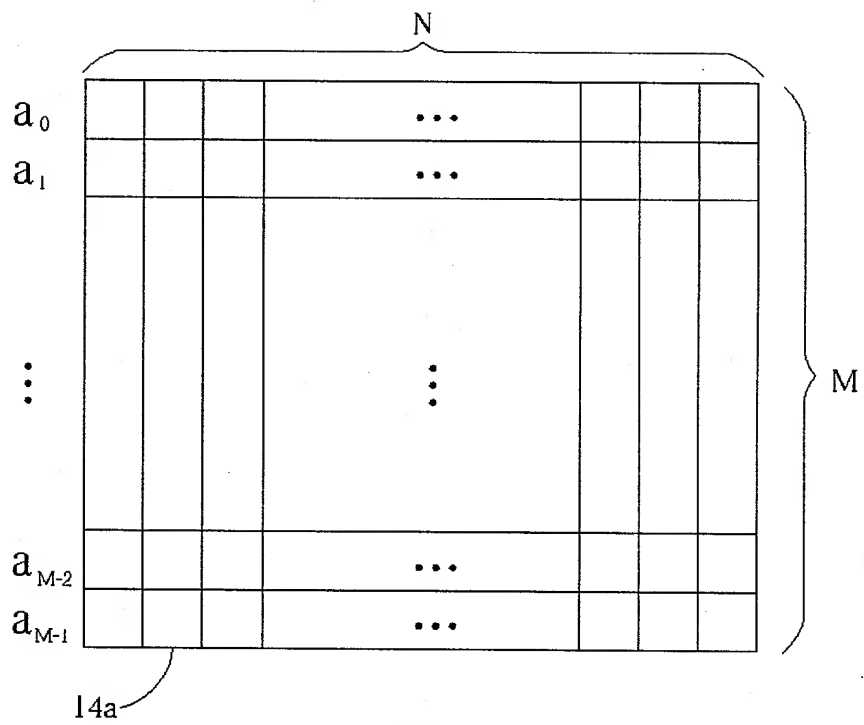


Fig. 1B Prior art

10063771.05.1103

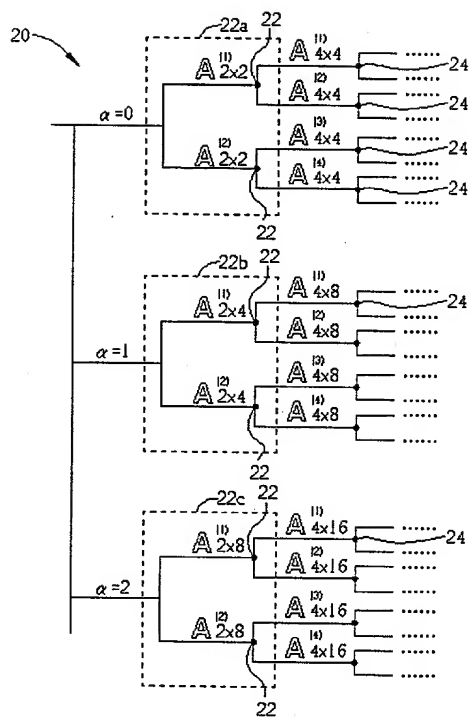


Fig. 2

$$A^{(1)}_{2 \times 2} = \begin{bmatrix} + & + \\ + & - \end{bmatrix}$$

Fig. 3A

10063771.054102

$$A^{(2)}_{2 \times 2} = \begin{bmatrix} + & - \\ + & + \end{bmatrix}$$

Fig. 3B

10063771.051103

$$\mathbf{B}^{(1)}_{2 \times 2} = \begin{bmatrix} + & + \\ + & - \end{bmatrix}$$

Fig. 3C

10063771-051102

$$\mathbf{B}^{(2)}_{2 \times 2} = \begin{bmatrix} - & + \\ + & + \end{bmatrix}$$

Fig. 3D

10063771.051102

$$A^{(1)}_{2 \times 4} = \begin{bmatrix} + & + & + & - \\ + & - & + & + \end{bmatrix}$$

Fig. 4A

10063771-054103

$$A^{(2)}_{2 \times 4} = \begin{bmatrix} + & + & - & + \\ + & - & - & - \end{bmatrix}$$

Fig. 4B

10063771.051103

$$A \otimes B = \begin{bmatrix} a_{0,0}B & a_{0,1}B & \dots & a_{0,N-1}B \\ a_{1,0}B & a_{1,1}B & \dots & a_{1,N-1}B \\ \vdots & \vdots & & \vdots \\ a_{M-1,0}B & a_{M-1,1}B & \dots & a_{M-1,N-1}B \end{bmatrix}$$

Fig. 5

$$A_{4 \times 4}^{(1)} = \left[A_{2 \times 2}^{(1)} \otimes A_{2 \times 2}^{(1)} \right] = \begin{bmatrix} + & + & + & + \\ + & - & + & - \\ + & + & - & - \\ + & - & - & + \end{bmatrix}$$

Fig. 6A

10063771.051102

$$A_{4 \times 4}^{(2)} = \left[A_{2 \times 2}^{(2)} \otimes A_{2 \times 2}^{(1)} \right] = \begin{bmatrix} + & + & - & - \\ + & - & - & + \\ + & + & + & + \\ + & - & + & - \end{bmatrix}$$

Fig. 6B

$$A_{4 \times 4}^{(3)} = \left[A_{2 \times 2}^{(1)} \otimes A_{2 \times 2}^{(2)} \right] = \begin{bmatrix} + & - & + & - \\ + & + & + & + \\ + & - & - & + \\ + & + & - & - \end{bmatrix}$$

Fig. 6C

$$A_{4 \times 4}^{(4)} = \left[A_{2 \times 2}^{(2)} \otimes A_{2 \times 2}^{(2)} \right] = \begin{bmatrix} + & - & - & + \\ + & + & - & - \\ + & - & + & - \\ + & + & + & + \end{bmatrix}$$

Fig. 6D

20250714 10:54:10

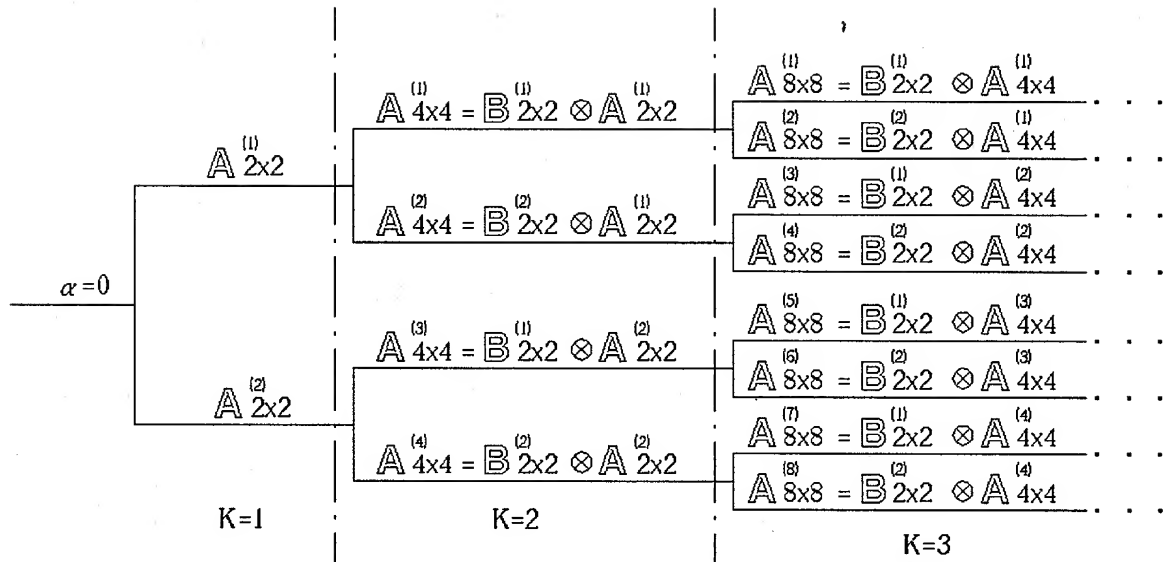


Fig. 7A

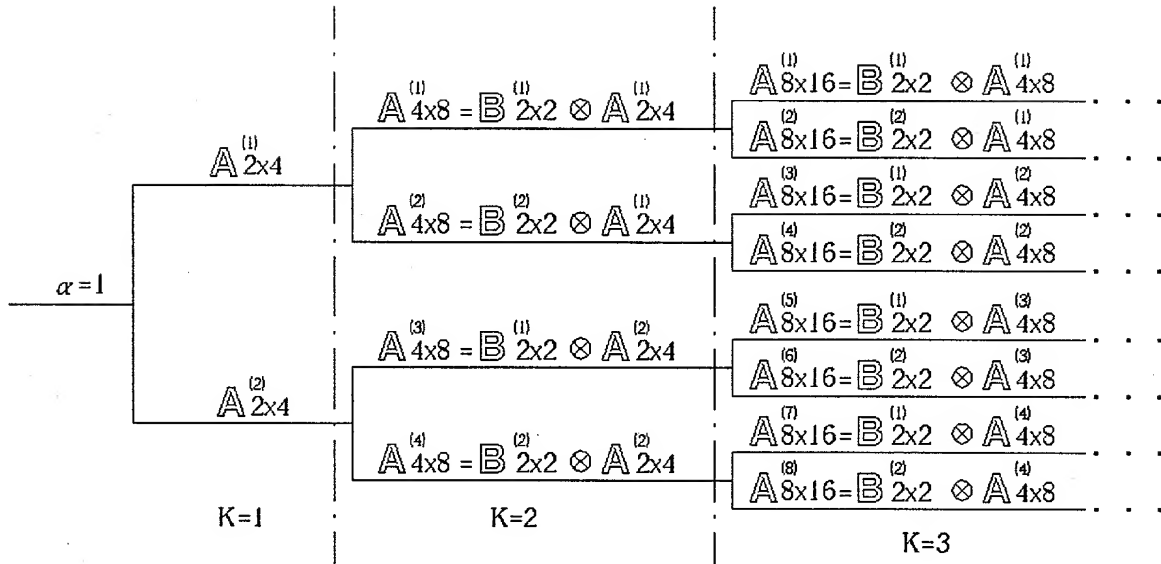


Fig. 7B

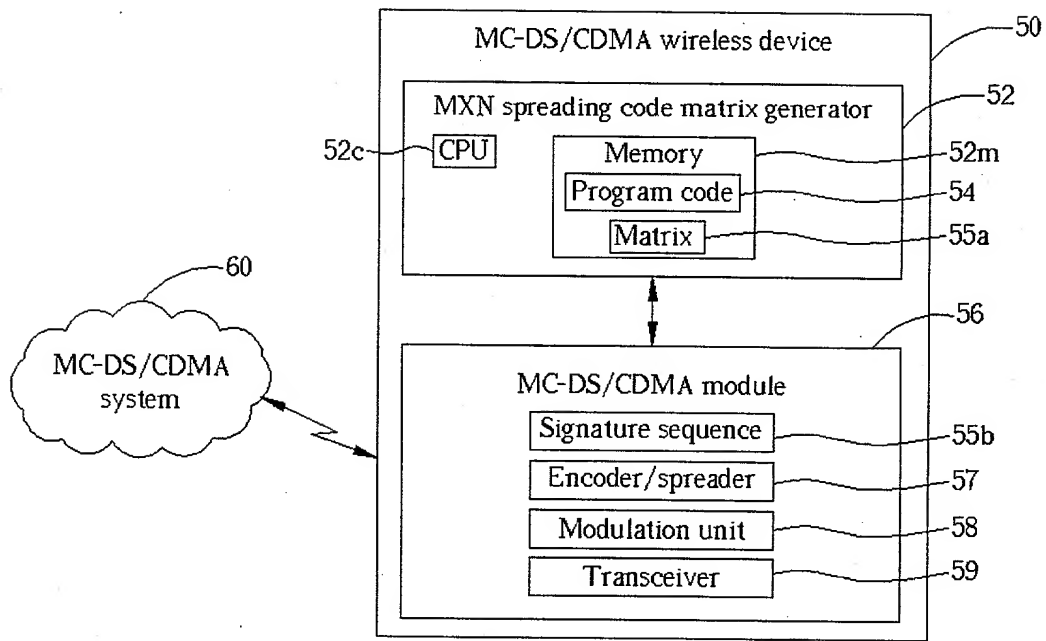


Fig. 8